

CLAIMS

1. An optical collimator structure comprising an optical fiber assembly of a plurality of unitary single-mode optical fibers each having a core, and a ferrule for supporting the optical fiber assembly inserted partially therein and bonded thereto, wherein the core has a graded index optical fiber bonded to the end face thereof, the graded index optical fiber along with the end portion of the core to which the graded index optical fiber is bonded being inserted in a hole of a capillary provided at an end of the ferrule, and the end face of the graded index optical fiber for emitting or receiving a beam of light having a tilt angle relative to the optical axis of the optical collimator structure.

2. The optical collimator structure of claim 1, wherein the end face of the graded index optical fiber has a tilt angle relative to the optical axis of the optical collimator structure.

3. The optical collimator structure of claim 2, wherein the tilt angle of the end face of the graded index optical fiber is the same as the tilt angle of the capillary relative to the optical axis of the optical collimator structure.

4. The optical collimator structure of claim 1, wherein the capillary has a conically shaped end face, at which the end face of the graded index optical fiber is located.

5. The optical collimator structure of claim 1, wherein the capillary has an end with facets, at one of which facets the end face of the graded index optical fiber is located.

6. The optical collimator structure of claim 1, wherein the end faces of the respective graded index optical fibers are arranged symmetrically relative to the center of the capillary.

7. The optical collimator structure of claim 1, wherein the graded index optical fiber is bonded to the

end of the core by fusion bonding.

8. The optical collimator structure of claim 1, which is used in combination with an optical component.

5 9. The optical collimator structure of claim 8, wherein the optical component is a mirror, a filter, or a branching filter.

10. The optical collimator structure of claim 1, which emits a beam of light and receives a totally or partially reflected beam of light.

10 11. The optical collimator structure of claim 1, which only emits a beam of light.

12. The optical collimator structure of claim 1, which only receives a beam of light.